. Drill Jig equipped with Milling Attachment. — The drill jig shown in Fig. 21 has mounted upon it a straddle-milling attachment for straddle-milling two bosses and cutting two oil slinger grooves in the lower half of an automobile crankcase. The crankcase is rigidly held in adequate supports in the drill jig, so that the light milling operation can be conveniently performed at the same time. The use of the jig for milling is also desirable, because the bosses must be in an accurate position in relation to the drilled holes.

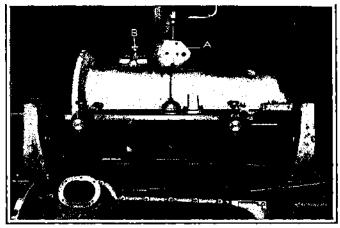


Fig. 21. Trunnion Type of Drill Jig equipped with Milling Attachment

In Fig. 21 the drill jig is shown in the loading position. The jig templet plate A has to be removed when the crankcase is being loaded on the jig. The crankcase is located by setting the outline to permanently located lines on the face of the jig. When the correct position is obtained, the crankcase is firmly clamped by four straps. After the crankcase is clamped into position, the templet jig A is replaced, being held down by the hand-nut B and located by a keyway in its under surface and a key in the main body of the drill jig. While in the position shown, the holes are drilled and tapped through the templet jig A, and this jig is allowed to remain in place, acting as a clamp, while the drilling and milling are being done.

After the completion of the foregoing operation, the drill